



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
URANIUM RECOVERY FIELD OFFICE  
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DENVER, COLORADO 80225

Return to URF0 467-23

40-8745

PDR

JAN 21 1983

URF0:YAY  
Docket No. 40-8745  
04008745311E

MEMORANDUM FOR: Docket File No. 40-8745  
FROM: Yvonne A. Young, Project Manager  
Uranium Recovery Field Office  
Region IV  
SUBJECT: REVIEW OF OGLE PETROLEUM, INC.'S R&D EVAPORATION POND  
LEAK REPORTS DATED OCTOBER 15, AND NOVEMBER 10, 1982

By letters dated October 15 and November 10, 1982, Ogle Petroleum, Inc., (OPI) submitted reports (respective to License Condition No. 47 of SUA-1396) regarding a leak in their R&D evaporation pond at the Bison Basin Project site. A synopsis of the evaporation pond leak report is discussed below.

Discussion

On October 10, 1982, OPI's mine employee, Mr. Judd Eifealtdt, discovered a leak in the R&D pond standpipe (inspection tube) during a routine daily inspection at the Bison Basin Project site. At the time of the leak detection, it was noted that the pond water depth and the pond water volume were 6.5 feet and 743,000 gallons, respectively. Additionally, OPI stated that prior to the detection of the leak, no discharges had been released into the pond since the past several weeks.

OPI stated that their channel of management was notified of the evaporation pond leak in a timely manner, and investigative actions and/or corrective actions were initiated at the project site.

It was noted that a sample of both the evaporation pond water (in question) and the water in the standpipe was taken for an immediate on-site assay. OPI stated that this onsite assay showed that chloride concentration in both samples was the same, and confirmed that the source of water in the standpipe resulted from the evaporation pond leakage.

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Prepared By B. Fisher

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Three pumps (operated on an all-night basis) were installed at the Bison Basin Project site; one pumping water out of the standpipe into evaporation pond No. 2, and two pumping water out of the R&D pond into evaporation pond No. 3. The depth of the pond water (at 7 o'clock on October 12, 1982) was noted at about 4 feet. OPI further stated that additional samples of the evaporation pond water and standpipe water were collected for a confirmatory on-site assay. Water samples collected from the standpipe, the R&D evaporation pond, and monitor well M-7 (nearest monitor well) were filtered and treated and submitted to a commercial laboratory for analyses.

By telephone on October 12, 1982, OPI informed NRC and WyDEQ about the R&D evaporation pond leak.

OPI stated that on October 13, 1982, Mr. Glenn Catchpole, (OPI) searched for the leak. It was noted that the pumping flow rate of the liquid being pumped from the standpipe had decreased to about 2 GPM, and the water level in the pond was about 1.5 feet. Later, the pumping of water out the R&D pond and the standpipe was terminated when the standpipe became empty.

On October 14, 1982, OPI stated that their staff discovered a three-inch puncture (which probably resulted from contact of a sharp object with the liner; however, no object has been discovered in the pond.) in the liner in the bottom of the pond in the northwest corner about 3 feet from a leak detection pipe. Subsequently, on October 15, 1982, photographs were taken of the puncture in the pond liner, and the punctured liner was repaired with a double patch in accordance to the manufacturer's recommended procedures and materials.

By letter dated November 10, 1982, OPI submitted their final written report to NRC regarding a leak in the Bison Basin Mine R&D Evaporation Pond. This report contained information for the given parameters for Monitor Well M-7, as required by License Condition No. 47. None of these parameters for monitor well M-7 exceeded their respective UCL's. Additionally, OPI submitted R&D Pond data and Standpipe water analysis data which confirmed that the water in the standpipe, as previously mentioned, resulted from a leak in the R&D evaporation pond. OPI also submitted diagrams and photographs (including the puncture) of the R&D evaporation pond.

OPI stated that they will closely monitor the R&D evaporation pond during the next several months. Anything unusual regarding the R&D evaporation

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pond will be reported to the NRC and DEQ in a timely manner. OPI further stated that the inspection tube sampling and pond monitor well sampling had returned to their normal (non-leak) situation frequency.


My review of Messers. Ted Johnson's and Dan Gillen's memoranda to file regarding OPI's evaporation ponds shows that the liner and other aspects of OPI's evaporation ponds design meet the suggested criteria of Staff Technical Position, "Design Installation, and Operations of Natural and Synthetic Liners at Uranium Recovery Facilities".

Based on the evaporation pond leak reports, I have concluded that OPI implemented the necessary investigative actions and/or corrective actions (in response to the R&D evaporation pond leak) in a timely manner, and has satisfied the requirements of License Condition Nos. 47, 65 and 77.



Yvonne A. Young, Project Manager  
Licensing Branch I  
Uranium Recovery Field Office  
Region IV

Approved By:



John J. Linehan, Branch Chief  
Licensing Branch I  
Uranium Recovery Field Office  
Region IV

Case Closed: 04008745311E